

## Civil Engineering Sewer Notes

- A MINIMUM HORIZONTAL SEPARATION OF SIX FEET IS REQUIRED BETWEEN SEWER MAINS AND SERVICES AND WATER, FIRELINE, AND RECLAIMED MAINS AND SERVICES. PROTECTION SHALL BE IN ACCORDANCE WITH MAG SECT 610.5.5 WITH THE EXCEPTION DUCTILE IRON PIPE IS NOT ALLOWED FOR SEWER CONSTRUCTION.
- 2. ALL SEWER TAPS SHALL BE WYE, WYE SADDLE, OR TEE.
- 3. CONNECTIONS TO EXISTING SEWER MAINS SHALL BE ACCOMPLISHED BY MACHINE TAPPING, UTILIZING A SADDLE, OR BY CONSTRUCTION OF A MANHOLE.
- 4. SEWER TAPS SHOULD HAVE 4-1/2 FEET COVER AT PROPERTY LINE. TO RAISE THE TAP FROM THE MAINS DEEPER THAN 6 FEET AND LESS THAN 12 FEET, THE WYE AND 1/8 BEND SHALL BE SET AT A 45 DEGREE ANGLE FROM HORIZONTAL AND A SHORT PIECE OF STRAIGHT PIPE SHALL BE PLACED ON THE 1/8 BEND. ANOTHER 1/8 BEND IS PLACED AT THE OTHER END OF THE SHORT PIPE TO BRING THE TAP TO APPROPRIATE GRADE AT THE PROPERTY LINE. FOR MAINS 12 FEET OR DEEPER, REFER TO C-410.
- 5. ALL SEWER SERVICE CONNECTIONS SHALL BE EXTENDED A SUFFICIENT DISTANCE BEYOND STREET RIGHT-OF-WAY LINES TO CLEAR ALL FACILITIES TO BE INSTALLED IN PUBLIC UTILITY EASEMENTS WHICH PARALLEL THE STREET RIGHT-OF-WAY. REFER TO MAG STD DTL 440, TYPE A, FOR ADDITIONAL REQUIREMENTS.
- ALL SEWER PIPE SHALL BE CONSTRUCTED WITH BEDDING CONFORMING TO C-402. ALL SEWER LINES 10 FEET IN DEPTH AND GREATER SHALL BE VCP PIPE, OR AS SPECIFIED ON THESE PLANS. LOCATOR WIRE AND IDENTIFICATION TAPE SHALL BE INSTALLED IN ACCORDANCE WITH C-408.
- 7. PIPE BACKFILL SHALL BE 1/2 SACK CLSM IN ACCORDANCE WITH MAG SECTION 728, UNLESS OTHERWISE DETAILED AND APPROVED ON THESE PLANS. PAVEMENT REPLACEMENT SHALL BE IN ACCORDANCE WTIH MAG STD DTL 200, T-TOP WITH A MINIMUM 16" DEPTH ABC SHELF.
- 8. ALL MANHOLES SHALL BE PRECAST CONCRETE PER MAG STD DTL 420 WITH 5-FOOT DIAMETER SHAFTS, 30-INCH DIAMETER COVERS, AND WITHOUT STEPS. MANHOLES IN ARTERIAL STREETS AND FOR SEWERS 18" AND LARGER SHALL INCLUDE CORROSION PROTECTION. ALL MANHOLES SHALL BE SPRAYED WITH PESTICIDE COATING. SEE THE LIST OF APPROVED PRODUCTS FOR CORROSION PROTECTION AND PESTICIDE COATINGS.
- MANHOLE FRAME AND COVER SHALL BE ADJUSTED PER MAG. STD DTL 422. WHEN OUTSIDE OF PAVEMENT IT SHALL HAVE BETWEEN 12" AND 24" OF REINFORCED CONCRETE ADJUSTING RINGS.
- 10. ALL SEWER PIPE 6" AND LARGER SHALL BE VACTORED AND INSPECTED FOR DEBRIS PRIOR TO ACCEPTANCE. ALL PIPE SHALL BE CLOSED CIRCUIT TV INSPECTED IN ACCORDANCE WITH MAG SECTION 615.11 (D).

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